CONTENTS OF VOLUME 22

NUMBER 1

1 Prediction of Heat Transfer from Burned Gas in Transitional Flow Inside a Tube **Mark R. Strenger and Stuart W. Churchill**

21 Analysis of Free Surface Transport within a Hollow Glass Ampule **K. Vafai and S. C. Chen**

51 Adaptive Grid Solution for Buoyancy-Induced Flow in Vertical Slots **W. Shyy, W. K. Gingrich, and B. Gebhart**

71 Laminar, Fully Developed Mixed Convection in a Vertical Eccentric Annulus **Prabhu Sathyamurthy, Kailash C. Karki, and Suhas V. Patankar**

87 Laminar Mixed Convection in a Horizontal Eccentric Annulus **Dipankar Choudhury and Kailash Karki**

109 Laser Flash Thermal Diffusivity Determination Procedure for High-Temperature Liquid Metals **Jennifer Murphy and Yildiz Bayazitoglu**

NUMBER 2

121 Numerical Simulation of Laminar Convection Heat Transfer from an In-Line Array of Discrete Sources to a Confined Rectangular Jet **D. M. Schafer, S. Ramadhyani, and F. P. Incropera**

143 Numerical Study of the Fluid Flow and Heat Transfer Due to a Heated Plate Moving in a Uniform Forced Flow **B. H. Kang and Y. Jaluria**

167 Steady Three-Dimensional Convective Heat Transfer in a Porous Box Via Multigrid **Amir S. Dawood and Patrick J. Burns**

199 Modified, Discretized-Intensity Based, Split-Radiation Calculation Procedure for Use in Full Simulation Studies of Combustion in Axisymmetric Piston Engines **David A. Blank**

223 Numerical Study of Transient and Steady Laminar Buoyancy-Driven Flows and Heat Transfer in a Square Open Cavity **D. Angirasa, M. J. B. M. Pourquié, and F. T. M. Nieuwstadt**

241 Numerical Errors of the Galerkin Finite-Element Method for Natural Convection of a Fluid Layer or a Fluid-Saturated Porous Layer **Tatsuo Nishimura and Yuji Kawamura**

NUMBER 3

257 Hydrodynamically and Thermally Developing Laminar Flow Through Rotating Channels Having Isothermal Walls **Shin Fann and Wen-Jei Yang**

289 Numerical Study of Natural Convection Heat Transfer in a Cylindrical Envelope with Internal Concentric Slotted Hollow Cylinder **M. Yang and W. Q. Tao**

307 Thermal Response of a Heated Vertical Plate Fin with Natural Convection–Radiation Interaction **Tsan-Hui Hsu and So-Yenn Tsai**

323 Numerical Analysis of Radiative Heat Transfer in an Aluminum Distributed Combustion Region **K. C. Tang and M. Q. Brewster**

343 Numerical Investigations of Heated and Unheated Lateral Jets Discharging into a Confined Swirling Crossflow **Y. C. Chao and W. C. Ho**

363 Applications of an Exponential Finite-Difference Technique **Robert F. Handschuh and Theo G. Keith, Jr.**

NUMBER 4

379 Analysis of Thermocapillary and Buoyancy-Affected Cavity Flow Using FEM **B. Ramaswamy and T. C. Jue**

401 Simulation of Laminar Buoyancy-Driven Flows in an Enclosure **E. Evren-Selamet, V. S. Arpaci, and C. Borgnakke**

421 Laminar Buoyancy-Enhanced Convection Flows on Repeated Blocks with Asymmetric Heating **Won T. Kim and Robert F. Boehm**

435 Oscillatory Convection in Solidifying Pure Metals **H. Zhou and A. Zebib**

469 Effect of the Convective Inertia Term on Bénard Convection in a Porous Medium **J. L. Lage**

487 Influence of Thermal Dispersion on Natural Convection Heat Transfer in Porous Media **H. Beji and D. Gobin**

Following page 500:

Title page to Volume 22
Contents of Volume 22
Author Index to Volume 22